

Reactor January-December 1949

January

February

March

April

May

June

July

August

September

October

November

December

January

Date	Caption	Dept.	Photographer	Number
1-4	This construction progress photo shows Brookhaven National Laboratory nuclear reactor complex which is nearing completion on the lab site at Upton, New York. The building on the left will house the chain-reacting atomic pile as well as laboratories to be used by scientists working with highly radioactive materials. On the right is the 320' air stack which is part of the reactor's air cooling system.		R. J. Walton	A 1-1-9
1-4	Aerial view of pile progress, construction and surrounding areas. A1-1-9 (cleared for public)		R. J. Walton	A 1-2-9 thru A 1-8-9
1-13	Aerial view of pile progress, construction and surrounding areas. A1-11-9 (cleared for public) A1-13-9 " " "		R. J. Walton	A 1-9-9 thru A 1-14-9
1-18	West wall of pile shield.		R. J. Walton	A 1-15-9
1-18	West wall of pile shield.		R. J. Walton	A 1-16-9

February

Date	Caption	Dept.	Photographer	Number
2-10	Lead gate, animal tunnel.		R. J. Walton	A 2-1-9
2-24	Hot laboratory facing northeast.		R. J. Walton	A 2-2-9
2-24	Exterior air ducts with fanhouse in background.		R. J. Walton	A 2-3-9
2-24	Active sewage disposal field.		R. J. Walton	A 2-4-9
2-24	Overall shot of hot lab facing northeast.		R. J. Walton	A 2-5-9
2-24	Exterior air ducts as they enter the fanhouse showing vent system.		R. J. Walton	A 2-6-9
2-24	Gas tank at transformer site.		R. J. Walton	A 2-7-9
2-24	Pouring helium trench south side.	Inman	R. J. Walton	A 2-8-9
2-24	Helium trench, east end - north side	Inman	R. J. Walton	A 2-9-9
2-24	Helium trench - east end - south side	Inman	R. J. Walton	A 2-10-9
2-24	Lead blocks of helium system - west end - south side. DECLASSIFIED 11/5/56	Inman	R. J. Walton	A 2-11-9**
2-24	Pouring of roof plugs.	Inman	R. J. Walton	A 2-12-9
2-24	Heavy concrete mixing plant.	Inman	R. J. Walton	A 2-13-9
2-24	Heavy concrete mixing plant.	Inman	R. J. Walton	A 2-14-9
2-24	Floor plugs for animal tunnel.	Inman	R. J. Walton	A 2-15-9
2-24	Lead covers over control rods.	Inman	R. J. Walton	A 2-16-9
2-24	Roof plug after final 1 1/2" layer of grout.	Inman	R. J. Walton	A 2-17-9
2-24	Roof plug before final 1 1/2" layer of grout.	Inman	R. J. Walton	A 2-18-9
2-24	Lead covers over control rod.	Inman	R. J. Walton	A 2-19-9**
2-24	Experimental hole plug before pouring	Inman	R. J. Walton	A 2-20-9
2-24	Roof plugs.	Inman	R. J. Walton	A 2-21-9
2-24	Pouring of helium trench - south side	Inman	R. J. Walton	A 2-22-9
2-24	First method of pouring north face tube plugs.	Inman	R. J. Walton	A 2-23-9
2-24	Plenum chamber slot plugs.	Inman	R. J. Walton	A 2-24-9
2-24	Roof plug with purge cock.	Inman	R. J. Walton	A 2-25-9
2-24	Parts of experimental hole plug.	Inman	R. J. Walton	A 2-26-9
2-25	Bellows rupture at hot filter section. #2 duct.		R. J. Walton	A 2-27-9
	<p>** TRANSFERRED TO CLASSIFIED DOCUMENTS SECTION.</p> <p>Negative Number A 2-11-9 - DECLASSIFIED 11/5/56</p> <p>Negative Number A 2-19-9</p> <p>A 2-19-9</p>			
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March

Date	Caption	Dept.	Photographer	Number
3-22	Overall view of hot lab construction facing east taken for pile building.	Reactor	R. J. Walton	A 3-1-9
3-22	General view of north side of pile building showing main entrance and lab wings.	Reactor	R. J. Walton	A 3-2-9
3-22	General view showing progress on hot labs. Pile building in background facing west.	Reactor	R. J. Walton	A 3-3-9
3-22	Core hole - no face.	Reactor	R. J. Walton	A 3-4-9
3-22	Helium trough plugs.	Reactor	R. J. Walton	A 3-5-9
3-22	Plug in plenum chamber roof slot.	Reactor	R. J. Walton	A 3-6-9
3-22	Roof plug.	Reactor	R. J. Walton	A 3-7-9
3-22	Shot well plug.	Reactor	R. J. Walton	A 3-8-9
3-23	General view of hot labs facing east, taken from top floor pile building.	Reactor	R. J. Walton	A 3-9-9
3-23	South face of pile building exterior.	Reactor	R. J. Walton	A 3-10-9
3-23	Looking into hot labs showing interior structure, facing east.	Reactor	R. J. Walton	A 3-11-9
3-23	North side of hot labs.	Reactor	R. J. Walton	A 3-12-9
3-23	Main entrance to pile building.	Reactor	R. J. Walton	A 3-13-9
3-23	Exterior southeast side of pile building.	Reactor	R. J. Walton	A 3-14-9
3-23	Overall view of hot labs with pile building in background, facing northwest.	Reactor	R. J. Walton	A 3-15-9
3-22	Shot well hole.	Reactor	R. J. Walton	A 3-16-9
3-22	North hole plug.	Reactor	R. J. Walton	A 3-17-9

April

Date	Caption	Dept.	Photographer	Number
4-11	Moving the helium system from T-112 to the pile building.		Garfield & Walton	A 4-1-9 thru A 4-11-9
4-29	Pile complex facing east.		R. J. Walton	A 4-12-9
4-28	Duplication of kodachromes taken by R. F. Smith.		R. J. Walton	A 4-13-9 A 4-14-9 A 4-15-9

May

Date	Caption	Dept.	Photographer	Number
5-3	Pile complex facing northeast.		R. J. Walton	A 5-1-9
5-3	Pile complex facing south.		R. J. Walton	A 5-2-9
5-3	Pile complex facing west.		R. J. Walton	A 5-3-9
5-18	Overhead of west exit air duct showing steel holes.		R. J. Walton	A 5-4-9
5-18	Section of east exit air duct showing sticks that have been replaced.		R. J. Walton	A 5-5-9
5-18	Closeup of replaced steel.		R. J. Walton	A 5-6-9
5-18	Men drilling holes thru membrane of east exit air duct to install studs.		R. J. Walton	A 5-7-9
5-26	Aerial view of pile complex showing north side of pile building.		R. J. Walton	A 5-8-9
5-26	Aerial view of pile complex (matching artist's conception) showing north face of pile building.		R. J. Walton	A 5-9-9

June

Date	Caption	Dept.	Photographer	Number
6-8	General view of hot lab facing north.		R. J. Walton	A 6-1-9
6-8	General view of hot lab.		R. J. Walton	A 6-2-9
6-8	General view of pile complex facing south.		R. J. Walton	A 6-3-9
6-9	North face of the hot lab from the top of the pile building.		R. J. Walton	A 6-4-9
6-6	Overall aerials of the pile site.		R. J. Walton	A 6-5-9 thru A 6-15-9
6-13	Expansion strips over cuts in wall plates, south plenum chamber.	Scully	R. J. Walton	A 6-16-9
6-13	Three steps in the rework of ducts.	Scully	R. J. Walton	A 6-17-9
6-13	Corner seals below south plenum.	Scully	R. J. Walton	A 6-18-9
6-13	Finished section after rework, before assembly of thermal shield.	Scully	R. J. Walton	A 6-19-9
6-13	Cuts in plenum chamber wall plates for expansion.	Scully	R. J. Walton	A 6-20-9
6-13	Expansion strips on plenum chamber walls (also showing stiffening bars).	Scully	R. J. Walton	A 6-21-9
6-21	Stud bolts used to hold liners inside exit air ducts.	Scully	R. J. Walton	A 6-22-9
6-21	Cross section of expansion joint for wall plates in the plenum chamber.	Scully	R. J. Walton	A 6-23-9
6-24	West wall of south plenum chamber showing expansion joints welded into place	Gurinsky	R. J. Walton	A 6-24-9
6-24	Corner in exit air duct showing re-enforcing rods in place.	Gurinsky	R. J. Walton	A 6-25-9
6-24	Top section of air duct showing studs protruding thru one layer of insulation.	Gurinsky	R. J. Walton	A 6-26-9
6-24	Re-enforcing sections welded into corner air duct.	Gurinsky	R. J. Walton	A 6-27-9

July

Date	Caption	Dept.	Photographer	Number
7-1	End view of thermal shield, wrong method.	Scully	R. J. Walton	A 7-1-9
7-1	End view of thermal shield, acceptable method.	Scully	R. J. Walton	A 7-2-9
7-1	Thermal shield over expansion joint.	Scully	R. J. Walton	A 7-3-9
7-1	Graphite plug for slot over plenum chamber.	Scully	R. J. Walton	A 7-4-9
7-15	Landscaping at pile site.	Hunter	R. F. Smith	A 7-5-9 thru A 7-8-9
7-26	Pile complex taken from Route 25.		R. J. Walton	A 7-9-9 and A 7-10-9
7-27	Long shot of pile site taken from Route 25.		R. J. Walton	A 7-11-9 and A 7-12-9
7-13	Inner liner in place before assembly of battenn strips.		R. J. Walton	A 7-13-9
7-13	T bolt for holding battenn strip, inner liner.		R. J. Walton	A 7-14-9
7-13	Inner liner with battenn strips in place.		R. J. Walton	A 7-15-9
7-13	Cut-out for rework around handling hole - south plenum chamber.		R. J. Walton	A 7-16-9
7-13	Inner liner "Dutchman" at expansion joint.		R. J. Walton	A 7-17-9
7-13	Completed rework of expansion joint around handling hole - south plenum chamber.		R. J. Walton	A 7-18-9
7-13	Completed rework of expansion joints. EEW wall plenum chamber.		R. J. Walton	A 7-19-9
7-13	Parts that make up seal around the handling periscope holes.		R. J. Walton	A 7-20-9
7-13	T bolts between inner liner plates.		R. J. Walton	A 7-21-9
7-13	Completed assembly of inner liner at corner.		R. J. Walton	A 7-22-9
7-13	Partial assembly of inner liner around bellows expansion joint.		R. J. Walton	A 7-23-9
7-13	Cap for intersection of expansion strips.		R. J. Walton	A 7-24-9

August

Date	Caption	Dept.	Photographer	Number
8-1	Bottom corner - plenum chamber bellows.	Reactor WScully	R. J. Walton	A 8-1-9
8-1		Reactor WScully	R. J. Walton	A 8-2-9
8-1	Bottom corner - plenum chamber bellows.	Reactor WScully	R. J. Walton	A 8-3-9
8-1		Reactor WScully	R. J. Walton	A 8-4-9
8-1	End of base plate structure.	Reactor	R. J. Walton	A 8-5-9
8-1		Reactor	R. J. Walton	A 8-6-9
8-1	Underneath, looking up, bottom horizontal section of plenum chamber bellows.	Reactor	R. J. Walton	A 8-7-9
8-1	ATM loading spring.	Reactor	R. J. Walton	A 8-8-9
8-1	Looking up at bellows and control rods liners, SE side of Pile.	Reactor	R. J. Walton	A 8-9-9
8-2	Looking down between grillage beams.	Reactor	R. J. Walton	A-9-9-9 A 8-10-9
8-2	Between grillage beams.	Reactor	R. J. Walton	A 8-11-9
8-2	Between grillage beams.	Reactor	R. J. Walton	A 8-12-9
8-2	Looking down, grillage beams at animal tunnel, open.	Reactor	R. J. Walton	A 8-13-9
8-2	Between grillage beams.	Reactor	R. J. Walton	A 8-14-9
8-2		Reactor	R. J. Walton	A 8-15-9
8-2	NE corner of Reactor and base plate.	Reactor	R. J. Walton	A 8-16-9
8-2	Between grillage beams.	Reactor	R. J. Walton	A 8-17-9
8-2	Between grillage beams.	Reactor	R. J. Walton	A 8-18-9
8-2	Looking down on Pile locking mechanism.	Reactor	R. J. Walton	A-8-19-1 A 8-19-9
-2	Bottom horizontal section, plenum chamber bellows.	Reactor	R. J. Walton	A 8-20-9

Date	Caption	Dept.	Photographer	Number
-11	Glass window over intake air duct on west side of Pile Building.	Reactor	R. J. Walton	A 8-21-9
8-19	Pile window. If and when this negative can be released for publication, crop photo closely to bottom window ledge as per LRT.	Reactor	R. J. Walton	A 8-22-9

September

Date	Caption	Dept.	Photographer	Number
9-2	Reactor <i>Mock up</i> Gurinsky <i>of</i> Expansion joint.		Smith and Walton	A 9-1-9 thru A 9-5-9
9-7	Reactor <i>Air distribution</i> for <i>System.</i> Gurinsky.		J. F. Garfield	A 9-6-9 thru A 9-10-9
9-9	Broken piece of graphite.	Gurinsky	R. J. Walton	A 9-11-9
9-21	Aerials of the pile site.		R. J. Walton	A 9-12-9 thru A 9-20-9
9-23	Broken pieces of graphite.	Gurinsky	R. J. Walton	A 9-21-9
9-23	Broken pieces of graphite.	Gurinsky	R. J. Walton	A 9-22-9
9-24	Paint peeling from walls in the pile laboratory wing.	Pruss	R. J. Walton	A 9-23-9 thru A 9-25-9
9-29	Exterior view of west side of pile laboratory wing in left foreground.		R. F. Smith	A 9-26-9
9-29	General view of pile building facing southeast.		R. F. Smith	A 9-27-9
9-29	Exit air ducts leading to fanhouse. Stack in background right.		R. F. Smith	A 9-28-9
9-29	General view of the pile showing the south and east exterior faces.		R. F. Smith	A 9-29-9
9-29	Exit air ducts leading up to fanhouse with stack in background.		R. F. Smith	A 9-30-9
9-29	Closeup of laboratory wing of pile.		R. F. Smith	A 9-31-9
9-29	Water cooling towers taken from the southwest.		R. F. Smith	A 9-32-9
9-29	Exterior west wall of the pile build- ing.		R. F. Smith	A 9-33-9
9-30	J. F. Garfield and L. B. Borst at pile gap.	Borst	R. J. Walton	A 9-34-9
9-30	Intake air duct weld northeast corner.	Borst	R. J. Walton	A 9-35-9
9-30	Intake air duct weld on pile shield southeast corner.	Borst	R. J. Walton	A 9-36-9
11-8	A 9-29-9 - Deleted.			

October

Date	Caption	Dept.	Photographer	Number
10-5	Pile exterior looking southeast.		R. F. Smith	A10-1-9
10-5	Hot laboratory from top of cooling towers looking northwest.		R. F. Smith	A10-2-9
10-5	Pile building looking northwest. Fan house at left.		R. F. Smith	A10-3-9
10-5	Pile exterior looking southeast.		R. F. Smith	A10-4-9
10-5	Pile exterior looking southeast.		R. F. Smith	A10-5-9
10-5	Pile exterior looking southeast.		R. F. Smith	A10-6-9
10-5	Pile exterior looking northeast.		R. F. Smith	A10-7-9
10-5	Hot laboratory view looking north from under ducts.		R. F. Smith	A10-8-9
10-6	Baffle plates in exit air ducts at bend.		R. J. Walton	A10-9-9
10-6	Steel section plates welded in place on top of exit air duct.		R. J. Walton	A10-10-9
10-6	Closeup showing how corner section plates are held in place in exit air duct.		R. J. Walton	A10-11-9
10-6	Graphite in slot over south plenum chamber.		R. J. Walton	A10-12-9
10-11	Aerials of pile site.		R. J. Walton	A10-13-9 and A10-14-9
10-26	Exhaust ducts to roof of Fan House.		R. J. Walton	A10-15-9
10-27	Lobby of Pile Building.		J. F. Garfield	A10-16-9
10-27	Freight elevator shaft in Pile Building.		J. F. Garfield	A10-17-9

November

Date	Caption	Dept.	Photographer	Number
11-3	Graphite test blocks. (Transferred: 10-108-9) .	Vassilopoulos	R. F. Smith	A 11-1-9
11-3	Graphite Machinery Tool. (Transferred: 10-182-9).	Vassilopoulos	R. F. Smith	A 11-2-9
11-3	Graphite blocks and threaded plug after test. (Transferred: 10-183-9).	Vassilopoulos	R. F. Smith	A 11-3-9
11-4	Lobby of Pile Building.		J. F. Garfield	A 11-4-9

December

Date	Caption	Dept.	Photographer	Number
12-15	Expansion bellows covers adjacent to the water cooler in south exit duct.	Nuclear Reactor	R. F. Smith	A 12-1-9
12-15	Top of baffle plate and roof of north exit duct.	Reactor	R. F. Smith	A 12-2-9
12-15	Typical construction in north exit duct under north plenum chamber.	Reactor	R. F. Smith	A 12-3-9
12-15	Typical construction in exit duct.	Reactor	R. F. Smith	A 12-4-9
12-15	Ceiling of north south plenum chamber.	Reactor	R. F. Smith	A 12-5-9
12-15	Inside wall of north plenum chamber showing eye beam which supports grillage.	Reactor	R. F. Smith	A 12-6-9
12-15	Thermocouples attached to expansion bellows and south exit duct.	Reactor	R. F. Smith	A 12-7-9
12-15	Air sampling pipes in roof of south exit duct.	Reactor	R. F. Smith	A 12-8-9
12-15	Typical wall-floor constructions and exit duct.	Reactor	R. F. Smith	A 12-9-9
12-15	Typical corner construction in exit duct.	Reactor	R. F. Smith	A 12-10-9
12-15	Incline near instrument house and south exit duct.	Reactor	R. F. Smith	A 12-11-9
12-15	Base of baffle plate and south exit duct.	Reactor	R. F. Smith	A 12-12-9
12-15	Top of filter frames for south exit duct.	Reactor	R. F. Smith	A 12-13-9
12-15	Typical expansion joint and cleaning chamber.	Reactor	R. F. Smith	A 12-14-9
12-15	Ceiling of exit duct near north plenum chamber.	Reactor	R. F. Smith	A 12-15-9
12-15	Typical expansion joint cover - exit ducts.	Reactor	R. F. Smith	A 12-16-9